



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER 484	FILED DATE 02/94	FIAT	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
------------------------	------------------	------	-----------------------	------------------

A 207145

EXAMINER

WILSON, J.

ART UNIT

PAPER NUMBER

1211

#15

DATE MAILED: 12/23/96

LYON AND LYON
611 WEST SIXTH STREET
34TH FLOOR
LOS ANGELES CA 90017

12M1/1223

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 10/27/95, an Ext. of Time and Amend. to Prov. Act

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 (Three) month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-38 is/are pending in the application.
Of the above, claim(s) 32-38 is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☒ Claim(s) 1-31 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.
☐ received in Application No. (Series Code/Serial Number) _____
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 14
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

08/300,484

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Best Available Copy

Applicant's election of Group I, claims 1-31 in Paper No. 14, submitted October 27, 1995, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (M.P.E.P. § 818.03(a)).

Claims 32-38 stand withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention. Election was made **without** traverse in Paper No. 14.

Claims 30 and 31 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim 9 contains the trademark/trade names SEPHAROSE and FRACTOSIL. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated

with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a solid support and, accordingly, the identification/description is indefinite.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the newly cited Hyman patent 5,436,143.

Claims 1-29 are drawn to a process for the preparation of a polynucleotide.

The Hyman et al. patent discloses a blocked method for the synthesis of oligonucleotides. Applicant's attention is directed to Figure 1, which schematically delineates a sequence of specific steps which are seen to render the instantly claimed method for synthesizing an oligonucleotide prima facie obvious.

The identification of the primers utilizable in the prior art process are set forth in columns 5 and 6. The steps of the instantly claimed method are seen to be closely analogous to the specific steps of the Hyman et al. Patent, see claim 1, wherein the following steps "comprise" the prior art method:

Serial No. 111,111
Art Unit 1211

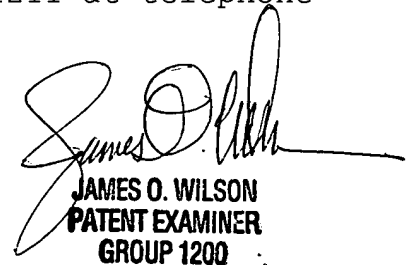
-4-

- 1) combining an oligonucleotide primer and a blocked nucleotide (or precursor thereof), in the presence of a chain extending enzyme,
- 2) removing the blocking group,
- 3) repeating the cycle.

In column 2 of the Hyman patent, it is noted that the use of solid supports in the "blocked" method is known, see lines 44-59. In columns 11-13, removable blocking groups for the 5'-nucleoside triphosphate are disclosed. In column 16, lines 19-54, the interchangeableness of TdT and the preferred chain extending enzyme in the Hyman patent, which is RNA ligase is set forth.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to prepare an oligonucleotide by the "blocked" method because the prior art discloses the method which "comprises" the steps applicant instantly claims. The Hyman patent provides the motivation to perform the instantly claimed steps in the same sequential order as instantly claimed to produce an oligonucleotide product.

Any inquiry concerning this communication should be directed to James O. Wilson, Primary Examiner in Art Unit 1211 at telephone number (703) 308-4624.


JAMES O. WILSON
PATENT EXAMINER
GROUP 1200